CDXA's new club call has been assigned--we're W4DXA!

Club repeater 147.180   AA4SC @ K4MQG   Fort Mill, SC

CDXA PacketCluster system

N4ZC Stanley, NC	144.930 & 441.000
digis on Young Mountain	DXUYNG 441.00
(type <C DXZ> after connecting to DXYNG)	144.950
digi in Greensboro (type <C DXZ> after connecting to DXYNG)	144.950
K4MD Charlotte, NC	144.910 & 441.075 (1200/9600 baud)
digi near Wingate	DXWIN

(A new digi, DXBMR, will soon be activated at Beamer Knob, VA--3361 ft elevation--improving our coverage area)

EDITORIAL

Once again, there's been no response to my clarion cry for newsletter input, from other than K4UHL--who's been absent from the hobby for a number of years, and wanted to know more about last month's W3AFM series, and how I find them relevant today. So, consider this issue the K4UHL and KA8FSM newsletter (who wrote last month, but too late for that issue). If you're "top of the Honor Roll," you'll just have to grin-and-bear it, as we explore some more basic issues and ideas this issue....

Probably the most basic idea within W3AFM's article is the notion of how important receiving is to any DXer. In using that receiver on the desktop, we're talking about listening and hearing. It's an idea we've lost sight of, sadly enough. With PacketCluster and an emphasis on "instant access" to everything in our lives, the idea of leisurely cruising up and down the bands has all but vanished today. (I've had several people tell me listening like this isn't really ham radio, but just being an SWL. Naturally enough, these people weren't DXers or contesters, but ragchewers. I admit I got bored with that aspect pretty early.) Yet, it's crucial to truly understanding what propagation means and how the bands react. There's no better example than K3ZO. I lived in Fred's home the first year after moving to Maryland, in 1988, and observed first-hand several things which I take to heart as vital operating techniques. I regret I can't follow the most obvious--getting on the radio 27 hours a day, as Fred often is, being retired. Seriously, there's no substitute for learning the bands. By being there--listening, analyzing and thinking about what you're hearing (as you're hearing it), you begin to know what's going on with a band. There is simply no better way to understand the mysteries of propagation than by listening to it. Doing this at various times of the day and night, as the bands react accordingly, is the best way to understand how to use them. Watching a computer screen, reading a chart, talking to your DXing buddies, or getting on a net, or ragchewing, will not make you a consummate operator.

Listening, tuning up and down a band, with the dials and knobs under hand, remains the best way. After all, it's what makes radio, well, radio, right? Combine this approach with the above litany of today's "instant access" methods and tools, and you can become that supremely skilled operator. I would say this idea is more important today than it was when W3AFM wrote his article because the stakes have risen even higher in the DX race. In addition to greater numbers, for instance, Rockwell's survey indicated very few antennas exceeding 100 feet in height. Very few long boom Yagis were in use. Low band antennas were low wires. DX spots, other than very specific and localized spotting nets (the Long Island DX Association was a pioneer) were unheard of, and magazines (look at Gus Browning's, Don Chesser's, or even the "How's DX" column in *QST*) carried spot info which discerning DXers would jot down to reference while tuning the bands. See how it worked? Despite equipment "limitations" and a lack of technical marvels, operators were indeed that--knowing the bands intuitively.

A glance at the survey will show several amps and antennas to be homemade. A glance at the second part of the survey, on the economics of station design, demonstrates how today's credit card method of problem-solving has created an "instant big gun" mentality. This approach permeates all aspects of our hobby, indeed, life itself today, or so it sometimes seems. Smart hams would take parts of each--the modern methods (packet, computer technology, new equipment designs) and older, more empirical approaches to the hobby--and combine them.

If you think about any of this for maybe 15 seconds, the so-called deplorable conditions on the bands (pileup etiquette or lack thereof) are more understandable. It's even a suitable metaphor for the quality of life itself. Remember my favorite slogan: "The best operators got, and get, that way by operating...." Me? I'm looking forward to some time spent listening. I'm looking forward to remembering the past, and moving forward at the same time.

--K4ZA

CAROLINA DX ASSOCIATION
1997 CLUB ROSTER

Call	Name	Address	City	State	Zip
AA4AM	Joel Stacks	2335 Rosewood Drive	Rock Hill	SC	29732
AA4NN	Joe Blackwell	6391 Baker Lane	Lake Wylie	SC	29710
AA4PQ	L.A. Simpson	3306 Old Charlotte Highway	Monroe	NC	28110
AA4R	Bill Parris	16741 100 Norman Place	Cornelius	NC	28031
AA4S	Ron Bailey	420 Community Road	Shelby	NC	28152
AA4SC	Rick Porter	1517 Fieldcrest Circle	Rock Hill	SC	29732
AA4SQ	Charlie McSwain	1708 Woodlea Road	Charlotte	NC	28214
AA4V	Steve Reichlyn	14 Seahorse Court	Isle Of Palms	SC	29451
AA4ZZ	Paul Trotter	6801 Folger Drive	Charlotte	NC	28290
AB4ON	Bob Sidi	15929 Bayshore Drive	Huntersville	NC	28078
AD4IE	Paul Ponak	635 Crater Street	Charlotte	NC	28205
AE4AT	David Leonard	740 Charter Place	Charlotte	NC	28211
AE4PB	Jerry Moore	2385 Witley Road	Fort Mill	SC	29715
AK4N	Grady Robinson	902 Forest Drive	Lancaster	SC	29720
N0IR	Tom Irwin	3321 Woodwardia Drive	Charlotte	NC	28210
K0SD	Stephen Budensiek	728 Lambe Road	Snow Camp	NC	27349
K1MIJ	Wilson Caselli	12104 Oakhaven Drive	Charlotte	NC	28273
K2SD	Scott Douglass	1591 Trojan Horse Circle	Fleetwood	NC	28626
K4BVQ	Frank Dowd	623 Lester Davis Road	Waxhaw	NC	28173
K4CDX	Steve Peterson	PO Box 2752	Boone	NC	28607
K4CEB	Larry Sossoman	4383 Ponderosa Lane	Concord	NC	28025
K4DFW	Bob Patton	2548 Aspen Terrace	Rock Hill	SC	29732
K4DGJ	Sam Hawes	308 Minden Lane	Matthews	NC	28105
K4DJ	Richard Moser	510 Third Avenue Drive SE	Hickory	NC	28602
K4DY	Les Murphy	PO Box 626	Hickory	NC	28603
K4EMN	Tony Elia	3520 Lakeview Drive	Pfafftown	NC	27040
K4HJE	E.V. Hicks	1467 Spring Hill Circle	Kernersville	NC	27284
K4IHN	Kent Miller	941 Ridge Road	Lexington	NC	27292
K4KL	Rick Kourey	4401 Asherton Drive	Charlotte	NC	28226
K4MA	Jim Stevens	6609 Vardon Court	Fuquay-Varina	NC	27526
K4MD	Joe Simpkins	2400 Flintwood Lane	Charlotte	NC	28226
K4MQG	Gary Dixon	1606 Crescent Ridge	Fort Mill	SC	29715
K4NYV	Lynn Pendleton	3617 Country Cove Lane	Raleigh	NC	27606
K4PC	Chris Penick	PO Box 1926	Boone	NC	28607
K4PYT	James Nipper	1818 The Woods Drive	Jacksonville	FL	32246
K4QO	Douglas Sanders	710 Hamlet Highway	Bennettsville	SC	29512
K4SE	Bob May	PO Box 453	Jonesboro	TN	37659
K4SFI	Bob Reed	426 Boyce Road	Charlotte	NC	28211
K4SI	Bob Cranford	1369 Little Valley Lane	Lincolnton	NC	28092
K4SLC	Don Brannan	11502 Painted Tree Road	Charlotte	NC	28226
K4UHL	Jim Long	121 Edgerly Court	Charlotte	NC	28214
K4YYL	Art Balz	PO Box 6762	Greenville	SC	29606
K4ZA	Don Daso	189 Timber Creek Drive	Stanley	NC	28164
K4ZO	Bruce Gragg	1544 Fox Dairy Road	Newton	NC	28658
KA8PSM	John Scott	16212 Walcot Lane	Cornelius	NC	28031
KB4LN	Summitt Boone	780 Soc Houck Road	Boone	NC	28607
KB4WPL	Pat Patterson	1418 Binford Court	Charlotte	NC	28212
KC4VAE	Boyd Williams	PO Box 82 140 Beam Street	Fallston	NC	28042
KC4YM	Claude Oakes	410 Cherryville Road	Shelby	NC	28150
KC4YOM	Jack Guion	817 Lynbrook Drive	Charlotte	NC	28211
KC8FS	Hal Turley	657 Forest Circle	South Charleston	WV	25303
KD4DY	Don Alexander	330 Appalachian Drive	Boone	NC	28607
KD4IL	Bill Taylor	214 Pelham Lane	Fort Mill	SC	29715

KD4OM	Jim Morris	409 Icard Ridge Road	Granite Falls	NC	28630
KD4RH	Gary Bader	712 Kelly Road	Elgin	SC	29045
KD4UC	Gordon Plyler	PO Box 848	Monroe	NC	28211
KE4EW	Dave Immel	5618 Davis Road	Waxhaw	NC	28173
KE4KGB	Joyce Medlen	696 Loblolly Drive	Vass	NC	28394
KE4UFA	Gene Willis	384 Highway 274	Vale	NC	28168
KF2X	Craig England	1105 Andrews Mill Road	Lamar	SC	29069
KF4HK	Jim Miller	11600 Hilda Court	Charlotte	NC	28226
KF4NO	Robert Denton	5618 Cherrycrest Lane	Charlotte	NC	28217
KI4TZ	Joe Barkley	PO Box 410344	Charlotte	NC	28241
KI4UD	Nestor Ravenna	102 Auckland Lane	Matthews	NC	28105
KI4YV	Bob Southworth	142 MeadowCreek Lane	Mooresville	NC	28115
KJ4DE	Pioneer ARC/DR	POB 30188 (13B32 BSC)	Charlotte	NC	28230
KN4CC	Steve Freeman	831 Wingrave Drive	Charlotte	NC	28270
KN4FO	Larry Jones	10110 Pioneer Mill Road	Concord	NC	28025
KN4R	Brian Harrison	4036 Proctor Street	Denver	NC	28037
KO4GU	Tim Creech	5500 Exec. Ctr. Dr. #215	Charlotte	NC	28212
KO4KC	Ken Cannaday	1929 Ewing Avenue	Charlotte	NC	28203
KO4MM	Gregg Swaim	Route 2 Box 449	Dobson	NC	27017
KR4IN	Paul Eaton	122 Nacho Lane	Cleveland	NC	27013
KR4RW	Bill McKay	617 Edgewater Drive	Belmont	NC	28012
KS4CD	Bill Hall	6310 Yellowood Road	Charlotte	NC	28210
KT4BD	Ed Evans	150 East Meadows Lane	Boone	NC	28607
KT4HN	Thomas Wright	7114 Monroe Road	Charlotte	NC	28212
KT4XT	Nobby Mills	132 Sunset View Lane	Statesville	NC	28677
KU4V	Wayne Starnes	701 Channing Circle	Concord	NC	28027
N2BT	William Thomas	652 Short Spoon Circle	Rocky Mount	NC	27804
N2HV	Jerry Malin	3056 Scottsdale Lane	Matthews	NC	28105
N2RFF	Kevin Kenny	1438 Ashley Creek Drive	Matthews	NC	28105
N4AA	Carl Smith	PO Box 6843	Ashville	NC	28816
N4APR	Ray Weeks	3025 Cutchin Drive	Charlotte	NC	28210
N4AXT	Hugh Campbell	1409 Cambridge Avenue	Gastonia	NC	28054
N4BY	Buddy Teague	2719 Old Pardue Road	Lancaster	SC	29720
N4FW	Charles Nelson	319 Marcelle Street NE	Lenoir	NC	28645
N4HIM	Joseph Yarborough	716 North Maple Street	Pageland	SC	29728
N4JEV	Larry Ross	7148 Pitchfork Lane	Mint Hill	NC	28227
N4JJ	Jack Jackson	PO Box 12612	Florence	SC	29504
N4JU	John Cannon	2985 Woodstream Drive	Valdese	NC	28690
N4LUF	Carlton Grainger	652 Kenwood Lane	Rock Hill	SC	29730
N4MM	John Kanode	Route 1 Box 73A	Boyce	VA	22203
N4NDL	Bob Aycoth	5910 Rocky River Road S.	Monroe	NC	28112
N4PQX	Bob Burton	851 Brockbank Road	Charlotte	NC	28209
N4QOG	L. E. Fairey	408 Centeridge Drive	Columbia	SC	29229
N4RF	Rick Neuman	1116 Mallard Landing Drive	Monroe	NC	28110
N4ROL	Mark Roberts	1900 Townsend Avenue	Charlotte	NC	28205
N4SU	Dave Kennedy	Route 3 Box 100	King	NC	27021
N4TC	Steve Collins	Route 6 Box 102	Galax	VA	24333
N4UH	Henry Elwell	2701 Rary Road	Cleveland	NC	27013
N4UOV	Jim Bishop	108 Creek Valley Drive	Charlotte	NC	28270
N4WMB	Mack Shannon	PO Box 278	Lancaster	SC	29721
N4XO	Dave Rawley	705 Rockford Road	High Point	NC	27262
N4YS	Mike Jackson	2568 Devon Drive	Dallas	NC	28034
N4ZC	Roger Burt	2421 Old NC 27	Mount Holly	NC	28120
N4ZX	John Lambert	4805 Sentinel Post Road	Charlotte	NC	28226
N4ZY	Jim Brown	6534 Bakers View Drive	Vale	NC	28168
N5BI	Gary Branch	415C Myrtle School Road	Gastonia	NC	28052
N7NH	Dan Morehouse	Route 1 Box 90C	Deering	NH	03244

Call	Name	Address	City	State	Zip
NA4L	Dave Newman	1001 Hanging Tree Road	Hillsville	VA	24343
W1VKQ	John Kenney	107 Foxwood Drive	Hendersonville	NC	28739
W1WW	George Felber	1414 Farmstead Road	Rock Hill	SC	29732
W4BFB	W4CC/John Covington	PO Box 217122	Charlotte	NC	28221
W4BZ	William A. Culpepper	900 Jefferson Drive	Charlotte	NC	28270
W4CC	John Covington	PO Box 217122	Charlotte	NC	28221
W4CZU	Bud Brown	PO Box 447	Taylorsville	NC	28681
W4DOU	Ross Sigmon	PO Box 70	Glendale Springs	NC	28629
W4FHI	Reagan Rowe	1123 South Church Street	Charlotte	NC	28203
W4HG	Wayne Ashworth	160 Bass Run	Salisbury	NC	28146
W4HKQ	Keith Queen	935 Bethlehem Court Road	Grover	NC	28607
W4HQF	Donald Voigt	PO Box 72	Dallas	NC	28034
W4IRE	John Huffman	2400 Hoyt Street	Winston-Salem	NC	27103
W4IU	Tom Skelton	230 Camelot Road	Clemson	SC	29631
W4IX	Jerry Hagan	4320 Wordsworth Lane	Charlotte	NC	28211
W4MBD	Bob McNeill II	PO Box 843	Morehead City	NC	28557
W4MDD	William Hutchison	73 Robin Hood Circle	Winston-Salem	NC	27106
W4MP	Mark Pearson	8326 Brynmar Drive	Charlotte	NC	28270
W4MPY	Wayne Carroll	682 Mount Pleasant Road	Monetta	SC	29105
W4MW	Roger Webb	PO Box 812	Mt. Holly	NC	28120
W4NC	Forsyth ARC N4VHK	PO Box 11361	Winston-Salem	NC	27116
W4PVT	McFarland W. Wood jr.	5800 McAlpine Farm Road	Charlotte	NC	28226
W4SI	Rodney Harper	2480 Colewood Lane	Iron Station	NC	28080
W4TJE	Jack Emerson	3283 Young Road	Lexington	NC	27292
W4UNP	Bill Jennings	630 Whitepine Drive	Catawba	SC	29704
W4UW	Richard Genaille	719 Quarterstaff Road	Winston-Salem	NC	27104
W4VHF	Ted Goldthorpe	2420-104 Roswell Avenue	Charlotte	NC	28209
W4WIT	Bernard Smith	5900 Masters Court	Charlotte	NC	28226
W4WMQ	Murphy Ratterree	264 Wayland Drive	Rock Hill	SC	29732
W4WN	Clifford Wagoner	9108 Chimney Ridge Trail	Charlotte	NC	28269
W4WNT	William Turner	4000 Horseshoe Bend	Matthews	NC	28105
W4ZQB	Al Guin	3301 Woodwardia Drive	Charlotte	NC	28210
W4ZV	Bill Tippett	PO Box 37	New London	NC	28127
W6NWS	Larry Knain	4917 Yates Mill Pond Road	Raleigh	NC	27606
W8AH	Al Hix	860 Alta Road	Charleston	WV	25314
WA1EHL	Gary Coulbourne	PO Box 140	Stony Point	NC	28678
WA4AFE	Royce Goodwin	210 Edenvale Road	Rock Hill	SC	29730
WA4BCB	Earnest Thompson	PO Box 326	Lilesville	NC	28091
WA4DAZ	Rob Rochelle	9019-A Nolley Court	Charlotte	NC	28270
WA4DZG	Barry Bridges	286 Straightaway	Fort Mill	SC	29715
WA4EQM	Mike Smith	7725 Hedrick Circle	Huntersville	NC	28078
WA4MWX	Dick Talbert	PO Box 342	Concord	NC	28025
WA4OBO	Ken Winston	3900 Brinton Place	Charlotte	NC	28226
WA4PLR	Pete Eldridge	220 Pinewood Lane	Rock Hill	SC	29730
WA4SWY	Larry Standley	5413 Guida Drive	Greensboro	NC	27410
WA4UNZ	Ken Boyd	6733 Cedar Springs Road	Charlotte	NC	28212
WA4UUP	Skip Richardson	6224 Glenridge Road	Charlotte	NC	28211
WA4VKW	Kim Hinceman	2300 Murray Mack Road	Fort Mill	SC	29715
WA4ZXA	Jimmy Floyd	133 Lakeview Circle	Thomasville	NC	27360
WA8WV	David Ellis	610 Hillsdale Drive	Charleston	WV	25302
WA9FWO	Frank Kolar	104 Rock Creek Drive	Greenwood	SC	29646
WB4HOK	Don Tunstill	1215 Dale Drive SE	Huntsville	AL	35801
WB4LMI	Herman Burney	3240 Cumberland Road	Winston-Salem	NC	27105
WD4PDZ	David Purifoy	PO Box 3437	Newbern	NC	28564
WM4I	Burke Jessee	Route 2 Box 529	Wytheville	VA	24382

PACKETCLUSTER NEWS

Problems with your HF rig are often noted by your contacts—folks tell you what they hear. With no one listening to your packet signal, this doesn't occur. Listening to your packets can show gross distortion or deviation problems, although by ear one could not tell if the transmit tones were off a bit, or if there was some kind of alignment problem within your TNC. Having more disconnects, or if the circuit seems slower because of extra retries, may be the first clue YOU have a problem within your TNC or radio.

One of the more obvious points to check (if you have connection problems), is the behavior of your TNC. Most TNCs have status lights. Note how they look when you are connected & everything's working normally. Pay attention to your DCD or carrier LED relative to your transmit LED & your STA LED. Note how often the PTT/transmit LED flashes when the STA LED is lit, before the STA LED goes out. (The STA LED indicates your TNC has a packet for the node to handle.) If the STA LED stays on, or your response seems slow, & your DCD LED is not lit, then your TNC, or your radio's volume or squelch may need adjustment. If you call your sysop with questions, having this information available will help. (Remember: You need to do YOUR part to guarantee PacketCluster works well—for you as well as others on frequency. Your TNC troubles can create problems or slow service to others.)

One scenario which may develop is this: You've been a faithful user for a long time—without any problems. Suddenly, you can no longer stay connected. You've changed nothing, so you think it's not your fault. You're sure you're right. (Some of this is inevitable; the Cluster is continually growing. More users means more traffic, which means more collisions, which means the system slows down.) A quick "check" is, of course, to listen to your own signal going out. Do this when your system works well, so you have some idea what's what. Another good "test" for the solidity of your connection to your node is your performance during busy or active times, like contests. If you get disconnected then, you're probably a marginal user—meaning your setup is no longer properly "tuned up" for the Cluster or your home node. Bob experienced considerable frustration just like this, on the WD4R (now K4MD) node. He tried everything. New antennas, new radio, & thought he was on the right track with a new dual band antenna (he was planning for a 440 MHz/9600 band link), but problems persisted. (Two other users experienced disconnects because of Bob's problems.) A bad coax jumper was attenuating signals 1-3 S-units. Replacement helped, but disconnects persisted. Finally, in frustration, Bob borrowed a different TNC from Joe. His, & the other user's, troubles stopped.

This borrowed TNC was an MFJ-1270, like he'd always used. He found the transmit tones had shifted frequency a bit, the receive function was out of calibration, as well as the transmitter deviation being a bit too wide. This demonstrated to him that, although your system may work well, improvements are possible. He also found this TNC's slower clock speed meant slower response times. So, he upgraded the CPU & SIO/O chips. (For those of you with older TNCs using Z-80/Z-80A chips, be aware such chips can run at 4 MHz, max. Bob upgraded his, & it's now running at 4.915 MHz internally, instead of the earlier 2.457 MHz speed.. Seeing a major improvement, he recommends this upgrade to anyone using these older chips.

If your TNC does not have a PERSIST parameter, another improvement is to install a new chip to allow for this. It's a simple plug-in modification. DCD modifications, which improve carrier detection, are a bit more technical. This mod allows the radio's squelch to be fully open. The TNC will only react to a packet burst; it no longer "hears" or sees noise, for instance. No more critical adjustments are needed. These improvements are standard on newer TNCs, but the mods are simple & easy to carry out. (Want more details? Check the TAP www page <www.tapr.org> for further information.)

Here's what happens when a DX spot leaves the node. With a clear channel on the user-frequency, the node keys the transmitter & sends the spot to a group of users. It sounds like one long transmission, but it's really a burst of individual packets strung together.. The node transmitter drops off briefly, looking for acknowledgments from those users. Then, the node keys up again to send the spot to the next group of users. The process repeats. Then, the node is quiet, looking for user acknowledgments for FRACK time. At the end of the node's FRACK time, the node keys again, & sends the spot to those who have not gotten their acknowledgments into the node. TNCs without PERSIST will all attempt to acknowledge the spot at once. Some will get through this RF riot; some don't.

PERSIST is important because it adds a "randomness" to each user—so they all do not try to transmit at once. If your TNC has it, when it tries to transmit an acknowledgment, it generates a random number between 1-255. If the number is less than the PERSIST value set in the TNC, it transmits immediately. If it's higher, it waits SLOT-TIME amount, generates another random number & so on. Almost all TNCs come with the same SLOT-TIME setting—330 milliseconds. Again, randomness is the order of the day, so check with your sysop regarding your TNC's SLOT-TIME setting. FRACK-TIME adds randomness as well. A slightly longer-than-you-might-first-think-necessary FRACK-TIME helps eliminate collisions. (A solid connection makes a longer FRACK a moot point if you get through with your first transmission. Another reason sysops are always harping for good signals from their users.) The more "space" users can put between signals, the less likely collisions will be in a given period of time. As a minimum, use eight seconds. After all, are a few seconds that vital?

The main parameters which can be adjusted are: PERSIST, SLOT-TIME, & FRACK. They impact significantly on your own station's performance, as well as other's. Any sysop can give you starting points. Keep a record of these settings, as well as whatever settings your sysop gives you, so if changes are needed, you have a solid starting point. (If <MYCALL> changes, it's likely that your settings have gone back to their default points.) The point to remember is this: It's simply amazing that PacketCluster works at all—not how well or how poorly it works. The chances for errors are staggering. Nodes send each user handshakes every eight minutes. That's 180/day if each one's received correctly the first time. On average, there are about 500 DX spots on a typical, non-contest day. There are LOTS of chances for a packet burst to get "lost" & cause user disconnects—such as deviation problems, audio distortion problems, intermod, fundamental RF overload, TNC parameter problems, noise, & so forth. (Multiply each potential problem by the sheer number of TNCs, nodes, digis, & you begin to appreciate the wonder & amazement sysops experience watching the Cluster work.) Trouble-shooting can indeed be difficult. It's certainly time-consuming.

If your TNC doesn't have PERSIST, consider modifying it or getting a new one. It's a plug-in mod—less than $5.00 for a new chip. The other mods (clock speed & DCD) are more complex, but again, are very worthwhile improvements. And, to ensure proper radio operation & setup, CDXA has a deviation meter it will loan to users. Again, always check with your sysop for the proper parameter settings FOR THAT NODE & FREQUENCY as the Cluster continues to grow. *—N4PQX & N4ZC*

The Back Page

Asheville, NC	N4AA	144.950	
Boone, NC	K4PC	144.590	digi DXBNE & DXBR 144.990
Elizabeth City, NC	WA4VTX	144.970	
Hendersonville, NC	K4QC	147.570	digi JODX
Nashville, NC	N4PE	144.976	temporarily off-the-air
Newport, NC	K4DHZ	144.930	
Raleigh, NC	W4DW	147.570	
Wilmington, NC	N4WI	144.950	
Aiken, SC	KN4UE	147.550	digi AGS in Augusta
Charleston, SC	KO4BR	145.630	
Columbia, SC	K4AVU	144.970	
Florence, SC	N4JJ	147.585	digi FLO
Greenville, SC	AC4RJ	145.650	digi SAS

RFI ENCOUNTERS IN THE REAL WORLD

Recently, I experienced some RFI at Corporate Media Services, which required considerable ██████████████ resolve. Here's the story. K4VQ's Charlotte Pipe & Foundry has expanded the lot next to our studio into a large parking & staging area for semi-trailerloads of their product. Our edit suites were plagued with strange sounds from the audio system. These noises created some interesting moments among clients. While our engineering & editing staff puzzled over a solution (the sounds were not going onto edit master tapes), I quickly concluded we were hearing CB conversations on the edit suite's speakers. The RFI was only apparent on the speakers themselves. The mixer, audio amp & processing system were each clean. I tried ferrite beads on the speaker & AC-power leads. I tried changing the length of the speaker leads. I built & installed a "brute force" filter system at the output of the amp. I tried more beads. Having exhausted all possibilities, I concluded shielded speaker leads were the only answer. However, the cost was enormous (the leads are 30 feet long), considering the heavy conductor size required. Even surplus outlets (like Dayton's Mendelson Electronics) proved too costly. Ham ingenuity came to the rescue. Using RG-213, I built two simple Faraday shield cables as speaker leads. In this case, the coax keeps the signal out—inexpensive, yet elegant. Our CB interference has been nearly eliminated. (It's as if there's one truck with an enormous amplifier or something—we can go for weeks without it, then all-at-once, we have interference for an hour or so.) —K4ZA
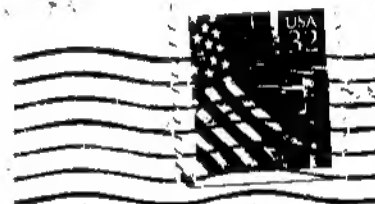
Congratulations & thanks are due to K4MQG, who went through the motions for CDXA with the FCC. Our new call, W4DXA, makes us seem more "official" somehow. Look for it on the repeater. Who'll be the first to operate a DX contest with it?

Something else to consider: Should the CDXA invest in a "page" or site on the World Wide Web? I write the Club Column in *CQ Contest*, & have encountered a tremendous number of clubs which DO HAVE sites on the Web. It's worth looking into—not only in terms of exposure for us, but raising us to a new & different level. Can, should, or do we spend money on a project such as this? Do we have any volunteers willing to take on Webmaster duties? Some monies would be saved distributing *The Pileup* electronically, of course. Whether these could equal the costs of the Web provider is still unknown.

A few words on the roster in this issue. I've tried to make it as complete as possible. I've also tried to make it look good—readable even though a small font was necessary in order to get it on a limited number of pages. Let me know if there are problems or changes are needed. I will be keeping the list from now on (something I never thought I'd be saying, at least in ham radio terms, hi). We'd like future versions to somehow include e-mail addresses for those members who are so-equipped. Please let me know if you have e-mail capabilities.

And finally, one last plea for newsletter input: *What do you want?* to paraphrase Mr. Freud?

Don Daso   K4ZA
189 Timber Creek Drive
Stanley   NC 28164
e-mail: *k4za@juno.com*
704-263-1134

CHARLOTTE NC 282
PM
14 AUG
1997

USA 32

FIRST CLASS MAIL

See something wrong on your address label? Notify K4ZA at once!

Ken Boyd WA4UNZ
6733 Cedar Springs Rd.
Charlotte, NC
28212

The Newsletter of the Carolina DX Association